

**GOVERNMENT OF KERALA
ABSTRACT**

Power Department – Policy Guidelines issued for the development of wind power in Kerala through private developers-Revised- Orders issued.

.....
POWER (PS) DEPARTMENT

G.O (MS) No7/2007/ PD dated, Thiruvananthapuram 11. 5. 2007
.....

Read: 1. G.O (MS) No. 23/ 2004/ PD dated 06.11. 2004

2. Letters No. 02-N/ RK Medu/ WPC/2303/ ANERT/8 dated 02.03.2007
from the Director, ANERT, Thiruvananthapuram

3. Letters No. 02-N/ RK Medu/ WPC/2303/ ANERT/9 dated 17.03.2007
from the Director, ANERT, Thiruvananthapuram

*4. Letters No. 02-N/ RK Medu/ WPC/2303/ ANERT/10 dated 20.03.2007
from the Director, ANERT, Thiruvananthapuram

ORDER

In the G.O read as first paper, Policy Guidelines for the Development of the Wind Power in Kerala Through Private Developers were issued. Part III of the said guidelines contains "Guidelines for Development of Wind Farms in Private Lands". The Director, Agency for Non-conventional Energy and Rural Technology (ANERT) has informed that according to the present policy guidelines, those who intend to set up wind farms in private land shall obtain technical approval from the ANERT. Before submitting the proposal for approval he should obtain NOC from the concerned LSG institution and should purchase/ obtain on lease the land proposed. On getting approval, the developer shall file a petition before the Kerala State Electricity Regulatory Commission for open access and enter into a bulk power supply agreement with Kerala State Electricity Board/ State Transmission Utility or other traders for sale of power. Since a number of agencies are involved, a developer finds it very difficult to start the wind farm after obtaining various clearances. Similarly, as per the existing guidelines the ANERT shall finalize and develop the pooling substation and transmission line from the pooling substation to the KSEB substation/ interconnection point in consultation with the KSEB/ STU as per the laid down specifications, after realizing the expenditure from the developer in two installments. ANERT can finalize the location and capacity of pooling substation only

after considering the technical proposals received by it. Also ANERT is not in a position to take up this work due to lack of sufficient staff and financial support.

2. As per section 3.9 of the policy guidelines, the surplus transmission capacity will be available for wheeling power on payment of wheeling charges and other levies as determined by the State Electricity Regulatory Commission. Also transmission and distribution losses for wheeling power will be accounted at the rate determined by State Electricity Regulatory Commission. If these figures are available beforehand the developers can calculate the economic viability of the project and hence investor's risk will be minimized.

3. In the light of the facts mentioned above, the Director, ANERT has furnished a proposal for modification to Part III of the existing Guidelines, for approval of the Government.

4. Government have examined the proposal of the Director, ANERT in detail and are pleased to revise Part III of the Guidelines issued in the G.O read as first paper, as shown in the annexure to this Order.

The G.O read as first paper stand modified to the above extent.

By Order of the Governor,
K.K. VIJAYAKUMAR,
Principal Secretary

To

The Director, ANERT, Thiruvananthapuram
The Director, EMC, Thiruvananthapuram
The Chairman / Secretary, KSEB
The Principal Accountant General, Kerala, Thiruvananthapuram
The Accountant General, Kerala, Thiruvananthapuram
The General Administration (SC) Department- vide item No... dated 09.05. 2007
The Revenue Department
✓ The Director, Information & Public Relations
SF/ OC

Copy to

The PS to the Chief Minister
The PS to the Leader of the Opposition
The PS to the Minister (WS&BC&E)

FORWARDED/ BY ORDER

anilfred.T

Section Officer

III. Guidelines for development of windfarms in Private Land

3.1 Objective

This part of the guidelines addresses development of windfarms in private land. These guidelines are being issued in supersession of earlier Government orders in this regard. In case of any inconsistency with any of the provisions of existing orders, clauses in this document shall prevail.

3.2 Developer

- 3.2.1 Any individual, company, body corporate, partnership firm, joint venture-whether incorporated or not, artificial judicial person intending to set up windfarm in private land (hereafter referred to as developer) shall obtain technical approval from ANERT.
- 3.2.2 Wind power and wind power potential sites being gifts of nature are natural resources of the State. Government intend to ensure utilisation of their natural resources to suit the overall development strategy of the State in public interest. Thus permission for development of wind farms as CPPs will be given only after ascertaining the end user of electrical energy generated from the wind farms. As a policy, Government will not allow development of wind farm as CPPs by power intensive units and units which do not strictly adhere to the pollution control standards laid out from time to time.

3.3 Procedure for Technical Approval

The developer shall submit technical proposal in the prescribed format after conducting micro-siting and other surveys/investigation and finalisation of Wind Electric Generators (WEG) to ANERT. A Demand Draft in favour of Director, ANERT payable at Thiruvananthapuram towards non-refundable processing fee at the rate fixed by the Executive Committee of ANERT shall be sent along with the technical proposal. Technical proposals without Demand draft for the prescribed fee will be summarily rejected. Certified copy of title deeds and copy of sale agreement/lease agreement/consent letter from owner of the land shall also be submitted along with the technical proposal. The documents relating to the proposed land are for their identification by ANERT. According technical approval to the

proposal no way indicates confirmation of any right of the developer on the proposed land.

ANERT shall scrutinize and take a decision on the technical proposal within a period of 120 days from the date of receipt. ANERT may inform the developer in case of any defect in his proposal within 60 days from the date of receipt of proposal after initial scrutiny and give the developer one month time to resubmit the proposal after rectifying all the defects. The developer shall be entitled to proceed with the implementation of the project if the Technical Proposal is not rejected within 120 days after receipt of modified proposal by ANERT. The technical approval shall be valid for 2 years from the date of issue. On getting technical clearance, a detailed project report will have to be submitted by the developer to ANERT before starting the installation work.

3.4 Technical Proposal

- 3.4.1 The technical proposal shall cover all aspects connected with the development of the Wind Farm including technical specifications of WEGs, details of the proposed land, latitude, longitude and altitude information of the location of WEGs, spacing between WEGs, boundary clearances, evacuation plan etc.
- 3.4.2 The developer shall ascertain the feasibility of the site and expected energy output from the Wind Farm prior to submission of technical proposal.

3.5 Infrastructure Development

- 3.5.1 The Developer at their own cost and responsibility shall carry out necessary infrastructure development such as construction of approach roads, improvement to existing roads etc. In addition to that developer shall pay development charge to KSEB/STU.
- 3.5.2 Government in consultation with KSEB/STU will fix the development charge from time to time on a per Mega watt (MW) basis and the developers shall remit the charges to KSEB/STU. KSEB/STU shall issue permission for interconnection to the grid on a first come first served basis based on payment of the development charge. For small developers proposing to install single WEG, KSEB/STU may permit payment of the development charges in 2 equal

installments (one before interconnection permission and the other before interconnection) considering the merit of the application. In the case of small developers (proposing to install WEGs of capacity upto 1MW), KSEB/STU may permit interconnection to the grid on payment of 50% of the development charges and the balance shall be paid before interconnection, considering the merit of the application.

3.5.3 For technical proposals already under consideration as on 31-12-2006, the infrastructure development charge is tentatively fixed as Rs.20 lakhs per MW which will be finalised in consultation with KSEB and the difference, if any, will be settled between the developer and KSEB/STU.

3.6 Interconnection Permission

An application for interconnection for power evacuation shall be submitted to KSEB/STU in the prescribed format with a copy to ANERT. The application shall contain

- (1) Technical details of WEGs and their locations.
- (2) Proposed evacuation plan including specifications of transformer, tie-line, transmission line/sub-transmission line, metering and protective equipment etc. and drawings.
- (3) Estimate of implementing the above evacuation plan.

Non-refundable application fee of Rs.20,000/MW shall be paid as Demand Draft in favour of KSEB/STU.

The developer shall enter into bulk power supply/wheeling agreement with KSEB/STU/Successor entities of KSEB or other buyers for sale of power. But, power can be sold to other buyers only if KSEB/ Successor entities of KSEB refuses to purchase power.

3.7 Evacuation facility

3.7.1 KSEB/STU shall develop the evacuation facility according to a master plan prepared in consultation with ANERT to evacuate the total power from each of the potential areas. The plan shall

include construction of pooling station, transmission/sub-transmission line from pooling station to KSEB/STU substation and augmentation/up-gradation required for existing substations and grid for further evacuation. KSEB/STU shall also prepare an estimate for such evacuation facility beyond and including pooling station. The estimate shall also include supervision charges payable to KSEB/STU. Construction and maintenance of evacuation lines from WEGs to the pooling station shall be at developers' cost and responsibility.

3.7.2 In case of developers willing to undertake development of evacuation facility, KSEB/STU may permit such requests upon satisfaction of developer's technical and financial qualifications. The developer shall develop the evacuation facility as per the master plan in full or part as per KSEB/STU design. However in cases where the evacuation facility is permitted to be developed by the developer in part, that has to be carried out according to KSEB/STU's proposal and not according to the capacity requirement of the developer. KSEB/STU will reimburse the cost as per the sanctioned estimate for the work after deducting the supervision charges. Developer shall be eligible for adjustment of infrastructure development charges in the estimated cost..

3.8 Metering

Necessary main and check ABT compatible Special Energy Meters (SEM) of 0.2 accuracy class having import-export registering facility as per applicable IEC/BIS standards shall be installed at the cost of the developer, as per applicable CEA (Installation & Operation of Meters) regulations 2006 with its amendment there upon.

3.9 Type Certification

C-WET/MNRE approved machines shall only be given Technical Approval by ANERT. Technical Proposals with machines under type certification can be submitted and in such cases, a conditional Technical Approval may be given. However, installation can be started only after obtaining permission from ANERT producing the type approval/certification from C-WET.

3.10 Distance between WEGs and Boundary Clearances

The micrositing of WEGs shall be done so that

(1) The minimum distance between any two WEGs (existing and having technical approval) is 5 times the diameter of the rotor (D) in the predominant wind direction and 3 times the diameter of the rotor in a direction perpendicular to the predominant wind direction.

2) The distance from the WEG to the boundary of the plot proposed by the developer shall be at least half the rotor diameter plus 5 meters.

(3) The site will be inspected by a technical committee constituted by ANERT and its recommendations regarding boundary clearance, inter machine spacing etc. accepted by ANERT shall be binding on the developer.

3.11 Technical Requirements

3.11.1 The developer shall install adequate compensating equipment to maintain power factor more than 0.95 lag.

3.11.2 The developer shall pay for the reactive power drawn by the WEGs at the rate decided by KSEERC.

3.11.3 The developer shall comply with grid code including load dispatch and system operation schedule, metering, protection code, safety code etc. and all accepted codes and prudent utility practices as applicable from time to time

3.12 Transferability of Technical Approval

The technical approval is transferable to investors upon satisfying the conditions in Clause 3.2.2, if the transferee is ready to abide by the terms and conditions on which technical approval had been issued for the project. For transferring the technical approval, the developer shall submit a transfer application along with the transferee's undertaking and remit a non-refundable transfer fee of Rs.100,000/- per MW capacity to ANERT. If the

transferring unit is below the capacity of IMW, the same would be counted as IMW for this purpose.

3.13 Carbon Credit

The benefits of carbon credit if any available shall be shared equally between STU/buyer and investor.

3.14 Other Conditions

3.14.1 The Developer shall pay taxes, duties and other levies to the Central/ State Government as per statutes and rules in force.

3.14.2 The Developer shall develop the Wind Farm in accordance with the Technical Approval given by ANERT.

3.14.3 Any remedial/ compensatory measures directed by competent agencies to protect environment or any other activity found necessary by concerned Government Departments/ Local Bodies will have to be carried out by the Developer at his own cost.

3.14.4 The Developer shall abide by the rules and regulations framed by the Government from time to time in matters of Electricity and related activities by private agencies.

3.14.5 All directions/ approvals/ rules laid down in the relevant Acts/ controls/ rectifications issued by CEA/ CERC/ SREB/ KSERC or other Government Departments/ Agencies from time to time as adopted by the Government shall be binding on the Developer.

3.14.6 In case of dispute, the interpretation of the guidelines by the Government shall be final. In all such matters, to the extent possible, an opportunity will be given to the affected stakeholders.